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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/693,276	10/20/2000	Kenneth R. Owens	4910.00002	7435
5073	7590	08/18/2005	EXAMINER	
BAKER BOTTS L.L.P.			TON, DANG T	
2001 ROSS AVENUE			ART UNIT	
SUITE 600			PAPER NUMBER	
DALLAS, TX 75201-2980			2666	

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/693,276

Applicant(s)

OWENS ET AL.

Examiner

DANG T. TON

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/1/05; 6/14/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Claims 1-10 and 16-20 are objected to under 37 C.F.R 1.75 because of the following formalities:

In claim 1 line 12, " a first message" seems to refer back to a first message recited at line 4 claim 1. if this is true, it is suggested to change " a first message" to --- the first message ---. Similar problem exists in claim 16.

Claims 2-10 and 17-20 are objected since they depend from claim 1 or claim 16.

2. Claim 19 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 20 only claim the reverse notification network.

3. Claims 17-18 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 17 line 3, " said network" has no antecedent basis. The same is true with the terms " said network" recited in claim 18 and " The reverse notification network" recited in claim 20.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3,6, and 8-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Haskin et al. (newly cited 6,813,242).

For claims 1-3,6, and 8-20, Haskin et al disclose a method/system comprising :
establishing a downstream working path that includes the first data switch and the second data switch (see upstream path 13, down stream path 31, first switch 1 and second switch 3 in figure 3);

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establishing an upstream reverse notification path associated with the working path (see column 4 lines 53-54);

routing a first message from the second data switch to the first data switch via the upstream reverse notification path, the first message providing a fault status indication

for the working path (see column 4 lines 46-54);

wherein the upstream reverse notification path co-incident with the working path through the network (see column 4 lines 46-54);

wherein a topology the upstream reverse notification path can be represented by a directed a cyclical graph (see column 4 lines 42-45);

wherein the data switches are digital cross connect switches controlled by MPLS (see column 2 lines 28-30);

wherein at least one of the data switches maintains a table of incoming link and path identifiers and of outgoing link and path identifiers (see column 3 lines 1-11);

wherein the first data switch is a protection switch element;

wherein the second data switch is a protection merge element.

a destination switching system operable to receive downstream data along a working path through at least one data switching system that is upstream from the destination switching system;

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a first upstream switching system operable to provide the downstream data to the destination switching system (see column 4 lines 46-54);

a first upstream data link operable to couple the destination switching system to the first upstream switching system, the upstream data link operable to send an upstream reverse notification message from the destination switching system to the first upstream switching system, the upstream reverse notification message providing a fault status for the working path (see column 4 lines 46-54);

where the destination switching system maintains a table identifying upstream switching systems including the first upstream switching system (see column 3 lines 1-11_;

wherein the first upstream switching system is the at least one data switching system (see switch 1 in figure 2);

wherein the destination and first upstream switching systems are any one of asynchronous transfer mode switches that function as label switched routers, internet protocol (IP) routers, digital cross connect switches controlled by MPLS, and switches controlled by MPLS (see column 2 lines 28-30);

means for establishing a downstream working path that includes the first data switch and the second data switch;
means for establishing an upstream reverse notification

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path associated with the working path (see column 4 lines 46-54);

means for routing a first message from the second data switch to the first data switch via the upstream reverse notification path, the first message providing a fault status indication for the working path (see column 4 lines 46-54); wherein the upstream reverse notification path is not coincident with the working path through the network (see column 4 lines 46-54);

wherein at least one of the first and second switches includes means for maintaining a table of incoming link and path identifiers and of outgoing link and path identifiers (see column 3 lines 1-11); and

wherein the first and second switches are any one of asynchronous transfer mode switches that function as label switched routers, internet protocol (IP) routers, digital cross connect switches controlled by MPLS, and optical cross connects and switches controlled by MPLS (see column 2 lines 28-30).

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haskin et al. in view of Lee et al (6,879,594) .

For Claims 4-5, Haskin et al. disclose all the subject matter of the claimed invention with the exception of the data switches being ATM switches or IP routers in a communications network. Lee et al. from the same or similar fields of endeavor teaches a provision of the ATM switches or IP routers (see column 6 lines 9-11). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the ATM switches or IP routers as taught by Lee et al. in the communications network of Haskin et al.

The ATM switches or IP routers can be implemented/modified into the network of Haskin et al. by replacing switches of Haskin with the ATM switches or IP routers. The motivation for using the ATM switches or IP routers as taught by Lee et al. into the communications network of Haskin et al being that it provides much higher utilizations while maintaining the guaranteed QoS and speeding up the system's operation.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to

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point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haskin et al.

For 7, Haskin et al. disclose all the subject matter of the claimed invention with the exception of the data switches being optical cross connects switches in a communications network. However, the optical cross connects switches are well-known in the art. Thus, it would have been obvious to the person of

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ordinary skill in the art at the time of the invention to use the optical cross connects switches in the communications network of Haskin et al.

The optical cross connects switches can be implemented/modified into the network of Haskin et al. by replacing switches of Haskin with the optical cross connects switches . The motivation for using the optical cross connects switches into the communications network of Haskin et al being that it provides much higher utilizations while maintaining the guaranteed QoS and speeding up the system's operation.

9. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

In the remarks of 2/1/2005, applicant traverses the rejection under 35 U.S.C under 102 and 103. The traversal is based on ground that there is no disclosure in the patent for establishing an upstream reverse notification path associated with a downstream working path let alone an ability to send a fault status indication for the working path on the upstream reverse notification path as provided by the claimed invention. This argument is not found to be persuasive. Applicant's attention is directed at column 4 lines 48-62 wherein it teaches

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" The presented method of setting the alternative label switched path of the invention has the further advantages that path computation complexity is greatly reduced-only a single additional path between the source and destination switches of the protected path segment needs to be calculated. In addition, presence or traffic on the alternative path segment that runs in the reverse direction of the primary path can be used as an indication of a failure or congestion of a downstream link along the primary path. As soon as a switch along the primary path detects the reverse traffic flow, such as by sensors S in FIG. 3, it may stop sending traffic downstream of the primary path by initiating an immediate rerouting of data traffic to the alternative path as schematically indicated by the curved arrows representing reversing switches. As a result of this "crank back" process, the source switch 1 may indeed start sending data traffic directly as at D, FIG. 3 along the final alternative path segment" .

10. Applicant's submission of the requirements for the joint research agreement prior art exclusion under 35 U.S.C. 103(c) on prompted the new ground(s) of rejection under 37 CFR 1.109(b) presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.02(1)(3). Applicant is

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reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANG T. TON whose telephone number is 571-272-3171. The examiner can normally be reached on MON-WED, 5:30 AM-6:00 PM and Thur 5:30-9:30 A.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on 571-272-3174. The fax phone number for the

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organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Ton



DANG TON
PRIMARY EXAMINER